# Siddharth Bhattacharjee

S34bhatt@uwaterloo.ca In LinkedIn Github sid42.github.io

#### **SKILLS**

Languages and frameworks: Golang, C, C++, Python, C#, Java, Ruby, Solidity, GraphQL, React, Angular 8/JS Tools: Kubernetes, Docker, GCP, AWS, gRPC / Protobuf, Apache Kafka, PostgreSQL, MongoDB, Elasticsearch

#### **EXPERIENCE**

Dapper Labs

Vancouver, BC (Remote)

Backend Engineer Co-op (NBA TopShot)

Jan 2021 - April 2021

- Architected a data verification platform from scratch in Go to accelerate Customer Support workflows; authored scripts in Cadence, a resource-oriented smart contract programming language, to check for data consistency between the TopShot backend and on-chain state.
- Optimized GraphQL queries by migrating resolvers to a dedicated read service and utilizing pagination and field querying.
  Reduced overall response time for queries by 70%.
- · Led development on implementing new restrictions on transferring NFTs to eliminate fraud on the platform.
- · Created data migration jobs and corresponding event handlers to facilitate aforementioned feature work and data analysis.
- Deployed, maintained and monitored services using TeamCity, kubectl and k9s.

**DBRS Morningstar** 

Toronto, ON

Software Engineering Intern

May 2019 - August 2019

- · Developed components in Angular 8 and corresponding RESTful API endpoints using ASP.NET Framework as part of new workflow to streamline ratings process for analysts.
- Designed bulk import tool allowing analysts to instantiate 1000+ ratings through Excel spreadsheets at once.
- · Created view models used for PDF generation to automate data retrieval, reducing workflow for analysts by 45%.

**Waterloop** Server Systems Developer Waterloo, ON

Jan 2019 - April 2019

- · Designed Golang server and Protobuf interfaces for data streaming between desktop server and pod over WebSockets.
- · Created Javascript + MongoDB client to test and log incoming pod information.

**HORIBA Test Automation** 

Burlington, ON

Software Developer Co-op

Sep 2018 - Dec 2018

 Refactored XML resources using C# scripts, data models and 2-way data binding to create modular and cleaner schemas for approximately 40 device drivers, reducing file size of device drivers by 30%-40% and processing time by 90%.

**Bronte College** 

Mississauga, ON

Software Developer Co-op

Jan 2018 - April 2018

· Implemented payment and registration portals for AP exams using AngularJS and PHP.

### **PROJECTS**

Twitch Data CLI (Python, Pandas, Matplotlib)

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 Real-time CLI data tool to analyze over 40,000+ streamed messages per hour sent over IRC protocol using WebSockets and display relevant information like user engagement and viewer count.

#### Palmpong-v2 (React-Konva, Tensorflow.js)

· Clone of arcade game 'pong' using React-Konva and Tensorflow is where the user controls the paddle with their palms.

## **EDUCATION**

**University of Waterloo** 

Class of 2023

Bachelor of Applied Science in Computer Engineering

Term - 3B

• Relevant Courses: Real-Time Operating Systems (ECE 350), Systems Programming and Concurrency (ECE 252), Compilers (ECE 351), Database Systems (ECE 356), Computer Networks (ECE 358)